

June 14, 2002

**RE: Intermountain Power - Title V & Approval Order Compliance - Interpretation**

Attn: Milka Radulovic

Dear Director Spratt:

The Division of Air Quality (DAQ) has issued both an Approval Order (DAQE-049-02) and a Title V Operating Permit administrative amendment (#2700010001 4/10/2002) relating to modifications being made to the Intermountain Power Project (IPP) Units One & Two. Both of these permits outline the conditions under which those modifications are to be made and operated. IPSC seeks clarification of two identical conditions found in both permits.

On April 5, 2001, IPSC submitted a Notice of Intent (NOI) to the DAQ to uprate both units at IPP through several modifications. The modifications directly affecting emissions include increased heat input, boiler additions, and scrubber enhancement. The DAQ issued an AO and revisions to the operating permit with new conditions addressing these modifications. The conditions of particular interest are the lowering of emission limits so as not to increase the potential to emit criteria pollutants, and the use of "WEPCO" compliance reporting.

Conditions 9 and 25 of AO DAQE-049-02 contain new requirements pertinent to the uprate modifications at IPP. Condition 9 sets emission limitations for the main boilers. There are two groups of limits: (1) boiler emission limits for NO<sub>x</sub>, SO<sub>2</sub>, and PM<sub>10</sub> while operating the boiler at current design (pre-modification) heat input rates, and (2) lower emission limits while the boiler is operated when rated at new modified design (post-modification) heat input rates.

Condition 25 requires reporting consistent with the WEPCO rule to demonstrate that the uprate modifications did not result in significant net emissions increases under PSD.

The latest revision of Title V Operating Permit #2700010001 contains these same requirements. Conditions II.B.2.a, II.B.2.b, and II.B.2.c contain the new emission limits, and Condition II.B.2.f requires WEPCO reporting. Since these conditions mirror those found in the

AO, we will refer to the AO conditions for discussion, although these points apply to the Title V conditions as well.

**Clarification - Condition 9**

Condition 9 of AO DAQE-049-02 stipulates two sets of emission limits. One set of limits applies prior to the modifications of the current boiler design of 8500 MMbtu/hr, and the other set of limits applies after the modifications are complete when the boiler design heat input rate will be increased to 9225 MMbtu/hr. However, there is nothing in Condition 9 regarding emission limits during the modification process.

IPSC did not anticipate that an interim emission limit would be needed. IPSC has begun making the modifications listed in our NOI. Some of these modifications will be partially implemented at Unit Two prior to the full completion of the uprate modification in 2004. Specifically, a new dense pack turbine on this unit has been installed, some of the scrubber wall rings have been installed, and safety valves to the boiler have been modified. Through acceptance testing of the Unit Two turbine, we find that we can now operate most efficiently at 900 MW rather than at the current 875 MW. Operating at a production rate of 900 MW brings heat input requirements to the original design of 8500 MMbtu/hr.

If we choose to operate at this production level, natural fluctuations in coal quality and operating performance could cause the heat input to occasionally exceed 8500 MMbtu/hr.

Our question is whether the new limits in Condition 9 apply when heat input exceeds 8500 MMbtu/hr during the modification period that began April 2002 and will end April 2004. Condition 9 refers only to limits at current design and new limits at the new design after the modifications.

Our view is that the new limits should not be applicable during the modification period (April 2002 - April 2004) because those limits were intended to limit Potential to Emit (PTE) due to a redesign of the boiler that allows a continuous heat input of 9225 MMbtu/hour. Since the modification is not complete and IPSC intends to operate at or near the original design heat input rate, we believe the applicability of the new limits is unwarranted at this time.

**Clarification - Condition 25**

Condition 25 of AO DAQE-049-02 stipulates that in order to show that the modifications do not result in significant net increases in emissions, IPSC must follow the reporting requirements of the WEPCO rule. The WEPCO rule provides that utilities may compare actual emissions to representative future actual emissions to project emission increases resulting from modifications. The WEPCO rule requires that post-modification emissions be monitored and reported for five years after the modification to show that no significant net increases in emissions have actually occurred that result from the modifications.

Condition 25 (as well as condition II.B.2.f.1 of the operating permit) appears to require reporting under WEPCO beginning immediately. However, based on the fact that the

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modifications will not be completed until April 2004, we believe that the reporting should begin after the modifications to both units are completed.

The second to last paragraph of the abstract of the AO states that IPSC will monitor "post change emissions information and submit them to the Utah Division of Air Quality on an annual basis for a period of five years . . ." This language follows EPA WEPCO guidance documents. The "period of 5 years" appears to limit the WEPCO monitoring and reporting for this period only.

Note that the modification approved to be installed at IPP consisted of several equipment upgrades allowing a production rate of 950 MW and a design heat input rate of 9225 MMBtu/hour. Since Unit Two operation will be operating during the modifications at a production rate of 900 MW and at or near the original design rate, the modification is clearly not complete, and normal operation of the modification has not begun. Normal operation of the modification can only begin after the modification is complete. Any monitoring done before the monitoring is complete would not be representative of the conditions present after the modification was complete.

IPSC believes that WEPCO monitoring should not begin until the modifications have been completed in their entirety for both units. Further, since the WEPCO test is tied to annual emissions, the earliest the five-year period could begin, as a practical matter, would be one full year after the modifications are completed.

#### **Detailed WEPCO Discussion**

We have been reviewing in detail the issue of whether the WEPCO Rule's requirement for five-year post-modification monitoring and reporting of emissions should commence when certain modifications to Units 1 and 2 which increase the heat input begin or when they are completed. IPSC has also had discussions with DAQ staff concerning this issue. IPSC believes that the language of the WEPCO Rule and EPA's interpretations of the Rule indicate that the reporting period begins upon completion of the modification.

It is our understanding that both the amended Approval Order and the revised Operating Permit for Units 1 and 2 require the reporting of emissions for a five-year period following certain modifications to the units which result in an increased heat input. The Utah Division of Air Quality ("DAQ") has informally indicated that this reporting period begins when the work on the modifications begins, not when the work has been completed. Presumably, this conclusion is based at least in part on the fact that the units continue to operate during the period in which the modifications are under way, with intermittent periods of increased heat input. A fuller explanation of the details of the modification and conditions of the Approval Order and Operating Permit that are at issue is found in the draft letter to Rick Sprott, Director of DAQ, which we forwarded to Ms. Jennifer He of your office earlier.

In August 2001 (more than nine years after the WEPCO Rule was promulgated), the Utah Division of Air Quality incorporated the WEPCO Rule into the Utah Air Quality Rules. The

post-modification reporting provision is found in the definition of "Actual Emissions" in the Utah Air Quality Rules, and reads as follows:

(4) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the executive secretary, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the executive secretary if the executive secretary determines such a period to be more representative of normal post-change operations. (UAC R307-101-2)

The federal counterparts of this provision are found at 40 CFR 51.165(a)(1)(xii)(E) and 52.21(b)(21)(v).

Both the Utah and EPA post-modification reporting requirements specify that the reporting is for emissions "following" the modification and is for the five-year period "from the date the unit resumes regular operations." An interpretation of this provision which would require that the reporting include the time before the modifications are complete would be inconsistent with the plain meaning of the word "following" and would result in reporting before the resumption of "regular" operations. In addition, the period before the completion of the modifications is not representative of normal operations following the modifications.

In the preamble to the WEPCO Rule, EPA made the following statement regarding post-modification emissions reporting:

Appropriate records are to be submitted to the permitting agency on an annual basis for a period of 5 years from the date the unit begins operations (i.e., post-change operations after an initial shakedown period). A longer period, not to exceed 10 years, may be required by the permitting agency where it has determined that no period within the first 5 years following the change is representative of source operations. (57 Fed. Reg. 32314, LEXIS at 28 (July 21, 1992) )

To require reporting of emissions prior to the completion of the modification is inconsistent with the foregoing. The reference to the "initial shakedown period" is a clear indication that the reporting is to be of emissions following the completion of all the work on the modification.

This conclusion is reinforced in a Federal Register notice seeking comments on certain changes to the New Source Review rules. ( "Notice of Availability; Alternatives for New Source Review (NSR) Applicability for Major Modifications; Solicitation of Comment," 63 Fed. Reg. 39857 (July 24, 1998).) In that notice, EPA sought comments on extending the five-year tracking requirement for future actual emissions to ten years. The notice states that the purpose of the reporting period is to "encompass all increases in capacity utilization that could

result from a particular change. (63 Fed. Reg. 39857, 39859) EPA further suggested that ten years might be "appropriate for tracking future actual emissions after a change."

The WEPCO post-modification reporting requirement is addressed in EPA's Detroit Edison determination, in which EPA determined that a dense pack turbine project at Detroit Edison's Monroe Plant was not a major modification.

The PSD regulations also require Detroit Edison to maintain and submit to the delegated permitting agency, for a period of five years from the date the units resume regular operation following completion of the Dense Pack project, information demonstrating that the project did not result in an emissions increase. (Letter dated May 23, 2000 from Francis X. Lyons, Regional Administrator, EPA Region 5, to Henry Nickel, Counsel for the Detroit Edison Company, Enclosure at 21.)

Similarly, in a letter from EPA Region 8 concerning Otter Tail Power Company's Low Pressure Rotor Upgrade Project, EPA stated:

If Otter Tail utilizes the "representative actual annual emissions" methodology to determine that the facility is not subject to PSD, appropriate records must be submitted to the North Dakota Department of Health on an annual basis for 5 years from the date the unit begins operations after an initial shakedown period. (Letter dated April 17, 2001 from Richard R. Long, Director, Air and Radiation Program, U.S. EPA Region 8, to Gary D. Helbling, Environmental Engineer, North Dakota Health Department, Attachment A.)

The preamble to the WEPCO Rule addresses the types of information that may be used for the reporting:

Utilities may use continuous emissions monitoring data, operational levels, fuel usage data, source test results or any other readily available data of sufficient accuracy for the purpose of documenting a unit's post-change actual annual emissions. (57 Fed. Reg. 32314, LEXIS at 28.)

Given that the question is whether a modification results in a significant annual emissions increase (as measured in tons per year), the first report would not be until one year's data is collected following the completion of the modification.

In short, the WEPCO Rule clearly contemplates reporting of actual annual emissions for the five-year period following the completion of the modifications and the commencement of regular operations of the modified facility. To require reporting of emissions after the beginning but before the completion of work on the modifications would not yield data representative of normal operations occurring after the modification was complete.

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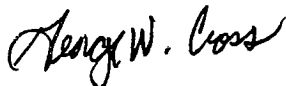
**Request**

IPSC requests the DAQ provide interpretive clarification of the issues concerning emission limit and post-modification monitoring as discussed above and during our meeting with DAQ staff on June 11, 2002.

I certify based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

If you have any questions during your review of these issues, please contact my staff through Mr. Dennis Killian, Vice President and Superintendent of Technical Services, at (435) 864-4414, or by e-mail at [dennis-k@ipsc.com](mailto:dennis-k@ipsc.com).

Cordially,



George W. Cross  
President & Chief Operations Officer and Responsible Official

 BP/RJC:jmg

cc: Blaine Ipson  
Bruce Harvey  
Mark Sedlacek  
James Holtkamp

**From:** "Rand Crafts" <rand-c@ipsc.com>  
**Date:** 6/9/02 5:28PM  
**Subject:** WEPCO Notes for Meeting 6/11/02

Milka,

In preparation for Tuesday's meeting, we have had the following discussion compiled. Please review so we can talk about it further. Thanks,

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Intermountain Power Service Corp  
435-864-6494  
435-864-0994 fax  
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#### DISCUSSION ON WEPCO REPORTING

We have been looking at the issue of whether the WEPCO Rule's requirement for five-year post-modification monitoring and reporting of emissions should commence when certain modifications to Units 1 and 2 which increase the heat input begin or when they are completed. IPSC believes that the language of the WEPCO Rule and EPA's interpretations of the Rule indicate that the reporting period begins upon completion of the modification.

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operations of the modified facility. To require reporting of emissions after the beginning but before the completion of work on the modifications would not yield data representative of normal operations.

CC: "Blaine Ipson" <BLAINE-I@ipsc.com>